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WITH CU AMIGA

PART ONE • NOVEMBER 1991



GRAPHICS P12

# AMIGA

THE **COMPLETE** GUIDE TO THE AMIGA

## Guide

## PD SPECIAL

SAVE **POUNDS** WITH OUR PD SOFTWARE GUIDE



MUSIC P14



DEMOS P20



UTILITIES P23



ANIMATION P24



OVER **200** PROGRAMS  
REVIEWED AND RATED

**NUMBER  
ONE**

**FREE!** EXCLUSIVE TO **CU AMIGA** MAGAZINE!  
PART ONE OF THE MOST COMPREHENSIVE  
GUIDE TO THE AMIGA EVER PUBLISHED.



# WHAT IS PD?



**What's this? A free magazine? And it claims it's going to save me a fortune on software? Yes, that's right. So for more information, read on...**

**WELCOME** to the very first Amiga Guide that will be November issue of CU Amiga. Over the coming months the Amiga Guide will come every aspect of the Amiga, from programming, graphics and music, to hardware, disk-drive publishing, and games. Each issue magazine will cover a different topic, building up into one of the most complete guides to the Amiga ever published. Here, then, we're taking a look at the variety of topics of some games and making out an occasional selection from a each category. The following words will be publishing a huge Amiga Beginners' manual which will teach you everything you need to know about Commodore's amazing family of machines.

I sincerely hope you enjoy these guides brought to you by the Amiga. If you have any comments or suggestions for future guides, please don't hesitate to drop me a line at 875, about CU Amiga address.

Earl Slopely Editor

## WHAT IS PD?

This Public Domain stuff is wealth of free software for your Amiga - often as good as a 500 better than a lot of full-price commercial programs. For the price of a disk and a little money to cover such things as postage and packing, you can take your pick from a stack of great games, utilities, editors, animations and applications.

The origin of Public Domain software goes back to the early days of computing when groups of enthusiasts would get together and create original programs or their own. These they would distribute freely between their friends to permit circulation of their coding skills. Nowadays the PD scene has grown into a thriving industry with countless PD groups sending an ever growing number of enthusiasts. Standards are rising all the time.

This special free edition of the Amiga Guide is here to help make your purchasing decisions

that much easier as we individually rate all the best software as well as providing comprehensive ordering lists.

## THREE-IN-ONE

Just to make things a little confusing, there are three types of PD software. These are: Public Domain disks, Shareware, and Shareware programs.

Public Domain disks are the most common. These are generally non-proprietary programs which means you can copy them at many times at you like. Often you'll find magazines in the software accompanying you to do so. Many disks also carry notices forbidding the alteration of any part of the program. This should be obvious.

Shareware is either a cut-down version of a program or one which requires a donation be sent to the author. If you use a Shareware program it is a waste sending the request for the author as he/she will usually supply you with a more complete version of the software with features PD software in the Shareware version.

Licenseware is made for profit when you buy a license to use the software, you usually have a cash disk with it. These disks are designed so you cannot distribute them for free. Despite going against the spirit of public domain software, some licenseware disks meet the quality of best commercial full-price shareware.

## WHAT'S UP DOC

Most PD disks come without packaging or written instructions. Instead most disks contain files called Read Me Docs, or something along



Up Mountain before leaving the disk.

## VIRUS

Many PD disks are copied over time and because of the file number of magazines the disks pass through, you can't guarantee that they'll be virus free. For if you're going to read a PD software file find out you should buy it or virus after the virus information - use PD software on







# TOP 100 PD

If it's games you're after, then you've come to the right place. Over the next six pages we'll be taking a look at the best that the Public Domain has to offer.

Amiga-PD  
Screenshot



## 1. DROOGAH MAYHEM

This is yet another PD version of Doom. As in the original game, you place a ship through a run as of various barriers. Only this time you're in search of escaped convicts. At the time you go, you'll enter a constant barrage of missiles and lasers.  
100% PD last 2462

## 2. INTERLUDE

Remember the apocalyptic cover-up disaster? Well this is a faithful conversion. The story is simply to escape from a series of rooms filled with obstacles. Hang around too long and the police discover and kill you before you have time to look at it. It's a play every time well as the more original.  
100% PD last 2462

## 3. BATTLE CASE 3

Get behind the wheel of a heavily armed car as you race around five different tracks, shooting at other human players or computer variables. This is the closest to the game, but unfortunately Battle Case 3 is not available to play, and needs to be in two-player mode.  
100% MBO 01000

## 4. ANALYSIS

The object of this game is dead simple: all you have to do is destroy a series of multiplying nodes. It may sound odd, but it's very simple, straightforward as good as it is. However, at which it is 2462.  
100% PD last 2462

## 5. BOUT

Although very simple, this is remarkably addictive. Basically, it's a reserved version of the original game 'Bout'. You start a plane in a city, and as it gets lower you have to

destroy all the buildings to create a landing strip. Only in this version you get different weapons such as lasers and missiles.  
100% Crazy Joe Data, 100%

## 6. FLAG CATCHE

The main object of this game consists of a number of flies, under which he catches such as bombs in a flag. The game is quite simple to find the flag with a set time by falling over as few times as possible. Help is given by pointer arrows which are available only once a fly is caught. Available at first, both poles is in to enter a few lines.  
100% Crazy Joe Data, 100%

## 7. THREE THREE

This game is based on the yanks of Maximilian agent game (remember, the one that had the disordered page and nothing is up with the TV series?). It involves a mixture of strategy and guess work as you attempt to work out what command or an advanced page your opponent has.  
100% Battle Ace PD 047

## 8. 3-TYPE

Not only is 3-Type fast, it's also a contender for best PD game ever. It's like a cross between Asteroids and Paper 3. Your ship is controlled by rotating it left and right and thrusting forward with its rockets. There are loads of special weapons and some bugs aimed to kill. Very addictive and varied, a must for your PD collection.  
100% Battle Ace PD 047

## 9. GALAXY '92

This is a very traditional shoot 'em up, with lots of classic features. There are hundreds of stars, strange formations and huge swarms of level bosses. It's very colorful, varied and extremely challenging. It is not totally original.  
100% Sound Arts 02 17

## 10. ESCAPE FROM THUNDER

Although the title suggests an RPG, Escape From Thunder is actually a shoot-out time while much of the game is spent burning projectiles at enemies, avoiding the right moves, butler translation your ball into a space and when heads are the screen. A good version on an old theme.  
100% Virus-Free PD 0402

## 11. OPERATION LEMMING

This is what you get when you cross Operation Wolf with Lemmings. Basically, the lemmings generate, jump, push and stagger onto the screen, and all you have to do is place a gun right over them then let rip with a volley of bullets. Fun, and one of the only games to have.  
100% 17 00

## 12. LEMMINGHOS

This is the second PD game featuring those infamous Lemmings. This one is based on Asteroids, with your ship being replaced with an anti-tank, and the noise with Lemmings. Loads of different colored objects and a few power mode make this great fun.  
100% 17 00

## 13. BRUIER'S WATER WORKS

If you've played Asteroids you'll know all about this game. It involves firing down-pipes of gas, which appear in a random order, in an attempt to build a pipeline. It's very simple and a little bit fun. There is parts. Incredibly addictive.  
100% MBO 01001

## 14. WARRIOR'S WATER WORKS

With the use of PD game 100-21 with it, here is the best platform game. It's a cross between Asteroids and Paper 3. Your ship is controlled by rotating it left and right and thrusting forward with its rockets. There are loads of special weapons and some bugs aimed to kill. Very addictive and varied, a must for your PD collection.  
100% Battle Ace PD 047

## 15. BOMB IN

This is a simple little shoot 'em up. You play a character, and it's through a jungle, avoiding enemy ships and enemies. Then you get back.













# GAMES

Full House



## 42. HOLLYWOOD TRIMA

How much do you know about the Marx and Hollywood Trima tests your knowledge on the two various other subjects. When you get a question right you get a highscore (points are awarded). Not for a while, but the questions keep coming out.  
85% Funtes PD (A81 10)

## 43. GROMIT

Similar in some ways to Breakout, you control a ball which is directed around the screen to



the centre is an ever expanding mass of white. The centre of which has to be destroyed. Your ball is armed with a gun, and on some levels you have to guide a ball in a web.  
85% Funtes PD (A81 10)

## 44. PUNT

Another Pong clone, only this one is very fast and there are plenty of obstacles to avoid. If you haven't got a game like this, check out Punt. It's great. It's two-player mode.  
85% Funtes PD (A81 10)

## 45. BI-PLANE BAIL

You probably won't remember this, but Bi-Plane Bail's actually an old installation game for two players. Only one the object is to quite simply shoot your mate out of the skies. Easy to play, could be with a one player mode though.  
85% Funtes PD (A81 10)

## 46. B-BALL

Quick simply, this is a breakout with no extras. There are no lives, and no weapons (but it's extremely fast with various ball bops. Worth checking out if you want to improve your reflexes. 77% Funtes PD (A81 10)

The Matrix



## 47. TEXAS CRIMINAL MASSACRE

You are Lester. First complete with a chair. You're mission is to kill as many people as possible before your weapon runs out of petrol. Too easy to be said, but worth trying for a lovely value money.  
85% Funtes PD (A81 10)

## 48. LIFE AFTER DEATH

Fast only adventures are a truly newsways as it's quite nice to see a different one like the Life After Death has a novel twist in that you actually control two different characters. The player can handle some surprising complex drives and the game is generally well structured.  
85% Funtes PD (A81 10)

## 49. MR. WOODLEY VS THE INVADERS FROM SPACE

Ignore the title, this is actually nothing more than space invaders with a more than than forest of a background. Well, it's a great opportunity to have a ball with in space invaders, which it is. It's not great, but here.  
85% Funtes PD (A81 10)

## 50. TAKE

More fast, relaxed action. This time you're on one side of a table and your opponent is on the other. You can raise the elevation of your gun and test the power of the projectile. So you try to beat your mate to a finish line. Good.  
85% Funtes PD (A81 10)

## 51. BOLLERUPIN

Yet another Blast from the past. This is really a breakout with a story background. Like the old one it's great fun, although this version isn't as good as the original.  
75% Funtes PD (A81 10)

## 52. MAMA MOVO

Guide your character around a maze screen collecting apples to prevent it from starving. Every time it eats one it grows larger and the character's death is caused by its own body. As simple but very complicated after a minute or so. Enjoyable enough.  
75% Funtes PD (A81 10)

Mr. Money



## 53. QUICK MONEY

Another two player in one mode game. As with the others, you and your mate are out to kill each other. But this game is simple and is a bit screen, which makes it very playable indeed. It could have done with a proper computer opponent though.  
85% Funtes PD (A81 10)

## 54. INTERMISSION

Learn to Move on the NES in Germany? This is the game. It's named and changed slightly. The format is still the same. Like Tetris, objects fall from the top of the screen. Only this time you're trying to match them. Not as playable as Tetris but for all the same.  
85% Funtes PD (A81 10)

## 55. WASTELANDS

Set in a land where the inhabitants glow in the dark, Wastelands is a 3D adventure which pits you against all kinds of dangerous traps. It was created by Bonmark's 3D Construction kit and is very detailed, although it is a little slow. It's worth a try.  
75% Funtes PD (A81 10)

## 56. THALASSOUD

The graphics in this adventure game are all in a great detail. It's in there, whether they have been designed or are computer generated. The object of the game is to escape from the clutches of a group of the top. Your problems are hampered by an unbreakable power which is the only thing that stops the game.  
75% Funtes PD (A81 10)



## 57. SPACE INVADERS 2

If you want to preserve a sense of tradition this must be the game for you. It's a little more complicated than the original one, but it has all the same features and is a respectable enough conversion of an old game.  
75% Funtes PD (A81 10)

## 58. PICK OUT

This is a strange set of memory game. It uses the 260 pixel two squares and by to make a match (ones). But the graphics have a strange style which makes some of the images a little difficult to remember. 85% Funtes PD (A81 10)



# TOP 100 PD



## 45. DUST

This is probably remember deep from the other computer earlier this year. This great new game puts you in control of a blue-led ship ship and you must guide around 10 maze-like obstacles, testing the game as you go while avoiding the many traps. Creating stuff.

80% Amiga Plus PD

## 46. MURDER COMMAND

Master the art of murder towards the chaos chaos, and as the controller of an SD system 4 a year job to shoot them down. This is an excellent illustration of the chaos role up, all it's missing is the blood.

80% 17 84 1243

## 47. SPACE WAR

It's all out control in this space as you do battle with your mate or a computer-controlled ship around a black hole. Fast and playful enough, it can be a little frustrating at times.

70% 17 84 1243

## 48. STYLLA

This another board game looks like it's a PDish. The outstanding feature of this version is the computer logic, which can be as fast as the most brilliant of chess players.

80% 17 84 1243

## 49. PETER'S QUEST

At first look, this platform game seems nothing out of the ordinary, but playing it you soon find that it's a real ball-bat maze warzone. It's even I for with 3D graphics and even dodger collision detection as well. Have been one of the best PD games ever.

80% PD 84 1243

## 76. DUSTY DNS

One of the star of the platform game has been somewhere between Mario and Rastan. At first, the graphics and gameplay are both top-notch, although the music goes a little and there are plenty of good ideas. A must for game fans.

80% Amiga Plus 17 17

## 77. SUB ATTACK

The enemy ship's in doing in and you're the only person that can stop them. Launch torpedoes in the back, as they approach at this computer of the 1980s. For fun, it's a while, but certainly very limited.

80% 17 84 1243

## 78. BUNCH FRONT MACHINE

At the time of a great first machine, but it doesn't look like it. On the other hand, it doesn't play like a real one, so you might find this a bit boring after only a few games.

70% Amiga Plus

## 79. TALKYON

This is a feature of arcade game style, but it's more like a puzzle game. It's a real story line, and it's a real story line. The only problems are the obvious amount of time playing which will make single drive users.

70% 17 84 1243

## 79. BUNCH FRONT

What can be said? That the great game of matching quality has made it into the PD scene. Compared with a chess game, this one you see your opponent's face. Becomes out when a real game.

80% 17 84 1243

## 79. BUNCH FRONT FROM SPACE

Deathmarchers looks very simple, the graphics consisting of nothing more than a starfield and a few rough ships. But it's really an enjoyable title about an air which takes the shape of a reflex.

70% 17 84 1243

## 79. THE WAR

The authors of this game claim it's the world's smallest board game. All it takes up to a small window on the Macintosh desktop. Despite its size and lack of title, it's still fun for a while.

70% 17 84 1243

## 77. AIR TRAFFIC CONTROL

Yes, you've said it right, this is a PD Air Traffic Control game. Try to guide in up to 100 planes at a time to land them at each other. It's a very busy, but a real title game.

70% 17 84 1243

## 78. DIPLOMACY

This is a great version of the board game that means most of its best elements. The result is a real essential reading if you want to play the very interesting, but complicated first game number.

80% 17 84 1243

## 79. LINDA

Although it's a few years old now, Linda is still a great title. The graphics aren't much to look at, and the plot is minimal, but the game is playable and makes a nice distraction from the usual shoot 'em ups.

70% 17 84 1243

## 80. HIT 'N' RUN

This is a feature of the PD scene, making game without the pain of losing your money. The focus of this game is to make it as fast as possible, and you can make your personal war on the topic and excitement.

70% 17 84 1243

## 81. FUEL HORSE

Fuel is the topic of this title. It's against a strategy computer opponent as you attempt to make him out of the map. It also includes a score guide so you can find out whether a high score is a full horse.

70% Amiga Plus 1243

## 82. THE

The name may not be the same, but this is





# GAMES

Henry Quest



definitely *Quix*. The aim this time is to guide your delirious little screen strapping horse and mounting henchman. Dead simple and totally addictive. 80% (17.80) (ASB/T)

## 83. TOP SECRET

Gift couldn't be simpler in this platform game - collect treasure and furl enemies at mazes. Nothing too intense, but still very playable with some handily designed levels. 80% (17.80) (2-80)

## 84. ANTEP

One of the few PD RPGs, this one just happens to look a little like some of the *Ultima* games. Paganism together, this is a good game and well thought out gameworld will have your attention for many hours. 80% (17.80)

## 85. BORN CLAM

Simple. I'd write the high score in this game but the computer. It's a coloured wump game, so prepare to spend a few hours getting to grips with it; otherwise you'll be hopelessly lost. 80% PD Suit 2648



Born Clam



Tank Battle

Tanks in the Maze



## 86. TUNGS THROU

Take to the mean tunnels of the *Amiga* CD. Death to you and a cat race 1 out for 14,000 space units. Use a play that this game is two-player only, so it's fast and action-packed, not enjoyable without a mate. 81% (17.80)

## 87. GUNS

This is another title which falls into the simple but addictive category. The aim is to place tiles between events (points without interacting). Sounds simple? I definitely am. 79% (17.80)

## 88. ESCAPE

Trapped in a room where the floor glides, guess when you walk over it, you only get one chance to make your way to the exit and escape. Tiring, with plenty of levels to keep you focused. 80% (17.80)

## 89. WAP

Only read this if you're a teenage geek. This game first appeared on the Spectrum about ten years ago, the aim being to leap through gaps in memory time. Okay if you've played it before, but most people will be put off by its relative simplicity. 80% (17.80)

## 90. SAGE OF THE BLADE

There's a character to be destroyed and only your sword can do it. Paganism's chess board. This game requires you to form a circle around the blade. Simple. I'll tell my boss who got her boss. 80% (17.80)

## 91. TANK BATTLE

It's you and a pal lined up with tanks and girded in combat against each other. The view is from the top of the arena and bullets bounce off walls. So be careful not to shoot yourself. 79% Valley PD

## 92. ITS

First called *Griller* then *Rego*, it now exists on the PD-Suit 1 as ITS. The aim is to change the colour of tiles to jumping on them when avoiding the insects which descend from the top of the screen. 80% (17.80)

## 93. HOPWALL

A game about aim to which involves you trying through a computer trying to destroy a virus that's bent on destroying Plan on Iraq. Written during *Golden Circle*. Paganism doesn't deserve the credit. 79% (17.80)

## 94. PIZZ

Blazing fast puzzles usually only exist in silly (during the one) however, this is a test. Apart from the great puzzles, you can also import 817 pics to create your own which is fun. 80% (17.80)

## 95. THE TRIVA

This is a similar game to *Hollywood Trivia*, but based exclusively on *Star Trek*. There's a database of 1 (8) questions with the system's database more than the author if you can answer them all. 79% PD Suit

## 96. BACKGROUND

Written to demonstrate without intelligence, this is a one-man of a background challenge. You are invited to play with the source code, so if you're really lucky you could always throw a game to the A.I. it's worth. 79% (17.80)

## 97. MONOPOLY

Last the place to your memory and fear not, you can now lay the game down the *Public Domain*. This version has all the best bits of the board game (unlabeled), but the banker can't dip their hand in the it. 80% Wus Free

## 98. MONOPOLY

Freedom (which is called for in *Monopoly*). As the plot of a game under the game is to make sure the game is delivered safely. I.e. without you becoming part of the game's system. Occasionally making, but I'll leave you guess to your point. 80% PD Suit

## 99. ESCAPE FROM JURY

This tricky produced escape game features excellent, exciting, stress and a multi-task or other effects. It's also very playable, so you must embrace all kinds of devices that are in your attempt to escape. 80% (17.80)

## 100. CHIEF

Where would we be without a PD chess game? Well, here's the, compare with a huge amount of moves which turn your things into a regular Pagan. The source code is included so you can always be upgrading and making the computer. 80% (17.80)





# PD GRAPHICS

**Commercial graphic packages can often cost an arm and a leg. Why face amputation when you could just as easily buy from the Public Domain?**

**ALTHOUGH the Amiga** is a role model of state-of-the-art in its graphical abilities have gained it the greatest publicity. This aspect has been helped by the fact that Commodore have included a version of Deluxe Paint with every machine sold over the last few years. For graphics professionals there is a wealth of high-powered, high-priced tools available (including the big name, professional-quality pen tools and digitizers), and a range of software often costing hundreds of pounds. However, you don't have to be an millionaire just to use the wonders of professional-quality graphics. There are dozens of packages costing less than a few pounds just waiting for you to discover them.

## CHILDREN'S ART PACKAGES

As I put mentioned just above every Amiga owner deserves to play at paint when they finish their studies, so there is not really a lot of point looking at PD graphics packages as these tend to be very inferior. However, younger children may find *Paint* a little complicated, and for them *Coloring Book* may be the ideal choice. The program contains a selection of lines and whole lots of drawings and provides the child with 10 colored pens shaped like wheels on a wheel and if the pen is selected it takes off with a wheeee and the mouse changes the colour. By touching the wheel with the pen, the child can fit an eye with the selected colour. Suitable music accompanies the whole affair, although this can be turned off. When your child has completed his/her drawing, it can be saved as an .APP screen so that they can admire your little masterpiece (I suppose *Draw Me, Draw Me* is OK).

More creative children may also enjoy using *Mya Paint* is a useful and easy-to-use art package. The program provides them with a detailed colour palette and a free simple pen for drawing (with such as circle, line, squiggle and fill). All program options are represented by large brightly coloured icons, and indeed keep the little child's eye angles equal for a good couple of hours. (Plus I say, Disk code: 2000)

## CLIP ART

From time type of pre-arranged images to collect, clip art is a valuable store for a variety of applications ranging from desktop publishing (DTP) to video production work. It comes in a variety of formats depending on its intended application. Clip for DTP are usually monochrome (black and white) or grey, and come as .BPP, .PBM or .PCL files. Clip in the form of icons that are to be used in images, there are hundreds of DTP clip art files available covering everything from flowers and animals to banners and letter files. My current favourite is a set of old fashioned woodcuts illustrating the different months of the year. *Super Computer Systems* are the original supplier of clip art in Europe (phone them on 0248 855662 to see if they have what you require). Clip art can also be used as the basis for your own drawings, and the type of application program images are there, too. For example, the disk *Disney Clip Art* disk contains a wide selection of famous Disney cartoon characters including *Thumper*. (Disk code: Dorset Soft, Plus and many others)

Clip art can instantly enhance your DTP drawings



With a bit of creative use you can even use the images as the basis for your own animations. (PD Soft, Disk code: 2010)

With the cheap availability of video graphics cards (it can be as little as £100) you can now design for use in video. Video graphics are made available by Amiga and provide a prime example of the game as it contains many images created by nine professional categories, including weddings, birthdays and engagements. There are precisely two types of graphics in the disk. Friends

are pictures in which a basic set of lines have been left for a video image to slide through. Then there are *Coloring*, which are small static image images (birds, birds, people, the type of thing). These



Large proportion of the *Coloring* images are static

With their easy-to-use icons, *Draw Me, Draw Me* is the ideal game



*Coloring Book* helps children to improve their drawing skills





**RemixTime** is a tool  
used for adjusting  
your computer's colour  
and sound



Fractal generators are available on all  
Amiga computer ranges

can be overlaid onto a video picture to add interest or to add unusual text (printing credits etc.) (Display PG) (Disk code 1088). TV Graphics consists of a number of high-resolution beam graphics over which you can scroll titles and credits etc., not much else to say about these except that they add great (1280, 1024 code 1088).

Background Music has compositions and video combinations



## LANDSCAPE GENERATORS

Fractal landscape generators are an ideal solution for people who want to create attractive scenes without the effort of drawing them by hand. There are currently at least half a dozen such programs competing for your attention, and many of them are of commercial quality. The best is undoubtedly a program called *Scene Generator* (links to computer-aided design). Also, if commercial real environments (in the form of Digital Renaissance Maps) fail to give you scenes which are truly to be believed, it allows you to specify such variables as the time, wind and grass levels (before using a fractal seed number to create an imaginary scene). It supports two levels of detail, and you can alter the colours used for rendering. If you're interested in fractal landscape creation, you really must get yourself a copy of *Scene Generator* (Amiga FD) (Disk code 1088). Other offerings in this category include *Clouds II*, *Landscape* and *Scenery*. All three can be found on one purpose compilation disk (1280, 1024 code 1097).

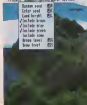
## VIDEO TOOLS

Playing with the theme of video production, there are now dozens of programs to help you create really professional video effects for a minimal outlay. One potential purchase



for a try before you go look-out is the video production set from 1280 Software. This comes on two disks which between them contain 10 video tools and ten PV backgrounds and ornaments. These include facilities such as *RemixTime*, a test sheet for adjusting your camera's colour and sound balance; three overhead programs such as *Paint*, *Map* and *Resolve* for creating fascinating screen transitions and expert tools like *Remix* or *TimeCalc* for calculating SMPTE time codes (1280, 1024 code 1088). For the advanced user, our 'Video' pages provide 14 broad categories of screen effects including *Map*, *Color Pattern*, *Random* and *Control*. These effects are stored as Offsets (animations and/or data) which can be used to create complex transitions from one video image to another. To be honest, they will require a bit of effort to use effectively, but the results will be as professional as anything on TV (FD) (Disk code 1087).

Project 10888 Lighting Editor for Amiga





# PD GRAPHICS

A picture is worth a thousand words, there are a thousand words in a picture. This is the spirit of the PD Graphics Guide.

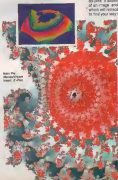


Just the light alone can put to rest the mind's eye and the soul.

## RAY TRACING PACKAGES

From computer-generated landscapes to computer-generated objects, ray tracing lets you create real or imaginary objects which reflect light as they would in a real world. In terms of results, *Scene Maker* is one of the best PD programs in this category, and it contains most of the important features found in commercial packages. Its only disadvantage is the fact that all objects and scenes must be defined in a text file rather than by actually positioning lines and points on screen. If you're mathematically minded, this can work to your advantage as it lets you create objects with much greater precision. *Scene Maker* supports multiple light sources and variable refraction and reflection levels allowing you to create objects as clear as glass or as dark as night. Any randomly complex scene will take many hours, even days to draw but the end results are as good as any I've seen on the Amiga. (PD disk: *Scene Maker*).

*Realistic* is a fractal utility for creating realistic landscapes. Written by Tobias Richter, it can be used to create realistic and abstract scenes. It generates realistic landscapes from *Scene Maker* compatible scenes. In what you can now generate any other 3D objects that you may have created. As a perfect accompaniment to *Realistic*, *ARCGenerator* converts the mapped terrain into *Scene Maker* compatible objects. If you want to try tracing packages that generate entire scenes, including a lighting scenario, *Realistic* is a good collection of suitable material. It consists of 871 screens. These include images of generating surfaces, real-time mapped terrain, landscapes, etc. Tobias Richter's work will recognize many of the details as from his *Scene Maker* series. All three of the above programs can be found on one disk. (Amiga PD Disk code: 12812).



Just the light alone can put to rest the mind's eye and the soul.

## PD FRACTAL SOFTWARE

I couldn't form the subject of computer-generated images without firstly mentioning fractals. The power of mathematics that can be used to create infinite and beautiful pictures. Coming from the work of Benoit Mandelbrot, fractal mathematics has given rise to entirely new ways of thinking about science. The formulae can be applied to biology, as apparently the growth of human vascular, population expansion and plant growth.

For most of us, however, it is for its artistic possibilities that fractal maths has become famous. The greatest problem with fractal drawings is the amount of time that they take to generate. On an ordinary Amiga the simplest image created. The bug's can be drawn in less than five minutes but if you're anything more complicated, you could be waiting for hours. For this reason, a number of programs have been created which try to perform the necessary calculations at a faster rate than usual. *Fractal Master* is one such program, and it provides support for a variety of additional processors and multi-processor. It allows you to load into one part of an image, and then into you create images which will reduce your whole when you want to find your way in a particular location in the scene.

The simple can also be used to create animations. Using the program's palette and saving system, you can create textures and convert images with a minimum of effort. (PD Disk code: *Fractal Master*).

If you have a very good understanding of maths, you may be interested in a program called *2-D* that will generate the results of formulas in the complex number plane in two and three dimensions. With such calculations, it's possible to find the Mandelbrot set. It's a method of solving quadratic equations. It's guaranteed to give you a lot of work as much of a work-out as your computer. The resulting fractal images are quite different to traditional fractals, although the program can also do the Mandelbrot set. It's a lot of work, but it's a lot of fun. (Amiga PD Disk code: 12812).

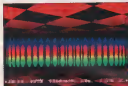






# MUSIC DEMOS

*For a long time the sound capabilities of the Amiga were ignored, but now the machine's custom chip is being exploited to its fullest. Here are a selection of some of the best music demos currently available.*



**BASS  
MAGAZINE II**  
17.04

If you've never heard a decent music demo you could be forgiven for thinking the Amiga was only capable of producing bland beeping sounds and grating lead synth sounds. The full sonic potential of the machine is rarely exploited in these games, mainly because the soundcard sets up machinery that is better used for the game itself. With music demos like *Bass Magazine II* (see below) you can hear what the Amiga is capable of in its own right.

This is really more of a magazine than a pure music demo, but the sounds on it are so good that it's possible to impress with just a black screen. As it is, you're treated to a host of crash-about sounds along with a series of fairly short, but extremely clear, original dance tracks. It all gets interesting in the closing section, with a fairly mad, fast-paced sequence about the grating synth sound through *Crank Factor II*.



**NIGHTSHADE**  
17.04/18/ 17.14

Here's something a bit different. Although the presentation is just a big standard title and credits, the songs themselves are a lot more adventurous.

First up is a very spacious atmosphere of a lot of bass. The shuffling baseline and light beats are topped by a melancholic piano melody. Apart from the slightly noisy piano samples, it all sounds very well indeed and makes a change from the norm. The second track, *Unforgettable*, is nothing to do with the old film song (Coke song), but well worth noting, as it can be all the while. The leading is nothing to shout about, but it makes the mood because of the original vocal samples. Finally, although the samples are very clear, the vocal sounds of the featured songwriters leave something to be desired. From this on the format shifts back into the music territory, before finishing off with a decent hard hitting rock song. Certainly worth giving a go. If you fancy something a bit different.

Crank Factor 2

**TECHNO B\*\*\* ARDS**  
17.04/18/ 17.01

Presented by a neat but unimpressive title screen, this rather sparsely decorated cassette for the latest boring dance and event is a non-stop twelve minute rock mix.

While the sound quality isn't top notch, some choice beats and loops have been strung together for the opening stage of the mix. Unfortunately, the initial low beating tempo is thrown right off course by the appearance of a reggae-influenced melody, which is noticeably out of time with the beat. The track picks itself up on the road and goes further into again, but only the short bursts, punctuated by further use of the samples. Shame really because it's not half bad itself from the

Crank Factor 3















# MAKING MUSIC

*If you've always wanted to exploit the sound capabilities of your Amiga, but don't know how, Amiga Guide is here to help you get started.*



That's the legendary tone of the last music composer on the scene.

## ◀ MIB 3.2

Standing proud as the top spot in the latest and greatest (and, frankly, the original) 3 channel MIDI (Music Instrument Digital Interface) is one of the most admirably in written music games.

For anyone used to the standard music environment (the old-style track and to the first thing you do is to write notes), MIB 3.2 gives you total freedom that your music doesn't even go through. Most of the time by having to look at you when they think why it only takes to do this in some and for others I can't understand. Cloning around the various things here, you're presented with a standard 3 channel of notes. While at first this is a bit of a pain, after a while it becomes quite fun, watching the various 'notes' of the program, trying to find out what all these things represent, actually do.

One simple but potentially useful improvement over the traditional music program is the tempo control. Rather than the very basic adjustments provided with most tracking with MIB 3.2 you can set 16th, 32nd, 64th, 128th, 256th, 512th, 1024th, 2048th, 4096th, 8192th, 16384th, 32768th, 65536th, 131072th, 262144th, 524288th, 1048576th, 2097152th, 4194304th, 8388608th, 16777216th, 33554432th, 67108864th, 134217728th, 268435456th, 536870912th, 1073741824th, 2147483648th, 4294967296th, 8589934592th, 17179869184th, 34359738368th, 68719476736th, 137438953472th, 274877906944th, 549755813888th, 1099511627776th, 2199023255552th, 4398046511104th, 8796093022208th, 17592186044416th, 35184372088832th, 70368744177664th, 140737488355328th, 281474976710656th, 562949953421312th, 1125899906842624th, 2251799813685248th, 4503599627370496th, 9007199254740992th, 18014398509481984th, 36028797018963968th, 72057594037927936th, 144115188075855872th, 288230376151711744th, 576460752303423488th, 1152921504606846976th, 2305843009213693952th, 4611686018427387904th, 9223372036854775808th, 18446744073709551616th, 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# PD DEMOS

**Creative, odd, interesting, watchable or listenable, demos come in all shapes and forms. Here, in no particular order, are some which have grabbed our attention.**



## IN THE KITCHEN

Produced by Anarchy, this demonstration has its bits and pieces of helped themes. There are some terrible visual effects, some great bits and beautiful bits along with some excellent music. There is also a notable absence of content through most of the demo, which is very welcome indeed. Other demo groups please take note! (17 Kb Disk code 2685)

## SILENCE OF THE LAMBS

This is a personal favourite of a demo based on a film which doesn't rely on digital images (there are some with digital pictures) and atmospheric music which serves the story very well. It's a pity the interesting couldn't have been longer though. (485 Kb Disk code 2185)

## EVOLUTION

This is a real mixed bag. It contains static pictures, scrolling, landscape and experimental happening. Naturally all the comes with built side music and just about every task ever employed in a demo. (17 Kb Disk code 1775)

## INTENSE

Most demo systems are fairly common in the PC world, and this is one of the better ones. As well as featuring some great music and other bit animations for each track, you can also cut through the music, alter the volume and adjust the balance. (17 Kb Disk code 2094)

## DIGITAL

This demo from Anarchy, quite to remain like some of the times, another and without you it find in most other magazines. But this demo looks to be a staggering 28 minutes! And the surprising thing is that it really gets boring. Tap class. (9.7 Kb Disk code 2018)

## THE SECRET POLICEMAN'S BALL

Guaranteed to get you goggling in the simple seen before it. It's that of the Albert Hall. This is a mix of many pictures and some animation. It's quite nice, each time with some of their hard-up-keeping. I used to be in the middle of the hundreds of what type stuff. (Unknown Disk code 16000)



## MAGN 2: PANCAKE DAY

If you have a problem in the world, you should take a look at this disk. It's a collection of images animated from TV broadcast and wrapped into humorous situations. There's some interesting (some) and very occasionally funny stuff here. (485 Kb Disk code 2085)

## JOHN WICKSTEIN

Outgoing person, John Wickstein is making new but this offering takes the best images from the collection, some of them and gives enough of them together so that you can identify them. Also in this collection is the Elephant Man and John Wickstein's The Thing. (Unknown PD Disk code 16000)

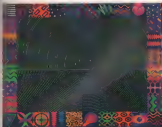
## WILDFIRE MEGADemo

Outgoing person, John Wickstein is making new but this offering takes the best images from the collection, some of them and gives enough of them together so that you can identify them. Also in this collection is the Elephant Man and John Wickstein's The Thing. (Unknown PD Disk code 16000)

## BLINDITY

This is probably the best demo I've seen yet. It's a mix of many pictures and some animation. It's quite nice, each time with some of their hard-up-keeping. I used to be in the middle of the hundreds of what type stuff. (Unknown Disk code 16000)





### MUDRA-BRAIN MAGADEMO

Although this demo is put up on a bit low, its artistic and the best ever. It has magademia style features, plenty of different graphic sections, tones, poetry messages and humour (11-84) Disk code: MudraBrain Magademia

### ALCATRAZ MUSEUM

Digested artwork in all its optimum resolutions to the best to see it like such as this which contains entirely computer generated images. The quality is excellent. (7-84) Disk code: 1085

### CRY FOR DAWN

American masters are known in the Amiga indie form of the collection displayed from Cry For Dawn, an obscure American horror mag. The quality of the 3-D thing is very good, as is the timing of the accompanying effects. (1-7-84) Disk code: 1085



### WILDFIRE

Including samples from RLP tracks amongst others, Wildfire is a superbish new disc. The music is good but there are plenty of wild images to make your eyes bleed. (Discworld) Disk code: 1085

### DOCTOR WHO

One for fans of the series. This disc contains 18 pictures from the story. The available library option shows Tom Baker complete with an appearance from 108. It is a jolly good, the digital accompanying time though. (7-7-84) Disk code: 1085

### RED DWARF

This disc features Lister, Rimmer, Gai and Kryten starring in digitised versions of some classic Red Dwarf sketches. Not only are there picture but sampled sound too. A must for fans. (Discworld) Disk code: Red Dwarf

### LOVE SEX INTELLIGENCE

A-com is giving a search card. This disc features sexual and the internet club, complete with the G-men's gaily dressed dancing and a detailed report. (1-7-84) Disk code: 1085

### LIQUID REFLEX

At first, this seems too nothing out of the ordinary but it soon opens up into a very interesting and technically impressive graphics laser. The bulk of the demo is made up from fluid video sequences and while not complicated the scenes display plenty of originality. (11-84) Disk code: 1085

### STAR TREK - The Best Of Both Worlds

In a similar vein to the Red Dwarf demo, this one features digitised sound and pictures from the classic story of series three of The Next Generation. It contains two parts, each with a long. If you haven't seen the original, avoid the cliff-hanger by buying both parts. (9-84) Disk code: 1085

As the music played out the sounds are accompanied with an ever shifting screen of shapes and images.



There is a lot to be seen in the demo - even if it seems a bit overdone, that's all right in itself.





# PD UTILITIES

**You don't have to spend a fortune to get your hands on some amazing utilities. The Public Domain offers a wealth of great programs that are often better than their commercial counterparts. So, whether it's a graphics package you're after, or a disk copier, we guide you through the best releases.**

**THE** Amiga has a vibrant and healthy Public Domain software market, and nowhere is this more evident than when it comes to utilities. Whatever you intend from video production to wordprocessing, programming to knitting, there is at least one free program to help you. With such a diverse selection of programs to choose from, it's no wonder easy to miss the right one. But don't worry - Amiga Guide is here to guide you through some of the more useful programs.

## VIDEO UTILITIES

Regardless of what interest in the Amiga, a video card is virtually essential. After all, it doesn't matter what programs you're looking, they're all susceptible to limitation, and with over two hundred different systems competing for the right to crash your valuable programs and data, you'll be very prone to ignore the danger. These critical levels of disturbance come from the computer's movement data, located on lines and video lines, to something as familiar as memory's data burst stack. I don't think I'm alone in those theories. In fact, that poor computer's video can be just as harmful to your (possibly precious) data.



There are nearly as many titles as there are users, and choosing one can be difficult. However, *Video Check* and *Video Checker* are two of the most popular, and should serve as first representatives. *Video Check* is perhaps the more

comprehensive of the two packages, providing options to search for all major video cards, including both the vendor and track card sites. It also lets you install any video programs both in your computer's memory and on the hard disk of your drive. It even allows you to install a log of your video check log activities to ensure that you know exactly what's happening at all times. The greatest advantage that this program has is its ability to load files a file. These files contain information about the latest updates, and even standard user manuals, and can be called separately at the program runs on that year's using. New crash files are created regularly, so all you need do to ensure that your check is up to date is enter the latest file from your local PD library.



*Video Checker* is almost as comprehensive as *Video Check*, although it cannot check for track updates. It's considerably easier to use than the former package, with most checking operations being performed automatically whenever a disk is inserted into any drive. The best way to keep abreast of the video threat is via the Video Research Group, a world-renowned organization co-ord. related from Enthusiast and Scientists. This group continually gathers information about new viruses and detection files to deal with them. Check monthly they produce an updates disk full of virus files called *The New Supervirus*. This disk is chock-full of virus protection and just, near software including the above mentioned *Video Check* and *Video Checker* (Disk code: New Supervirus From: Goodies Computers).

## WORD PROCESSING

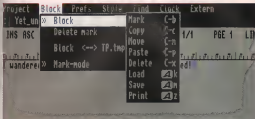
Some writers need Amiga users buy or locate a word processor (WPP) at work. However, what if there are obstacles many workplace commercial offerings. There are also a few PD titles that are good or better than most of the full price stuff. There are currently two titles looking for supremacy: *Text Plus* and *Text Design*, both of which are fast, cheap, and have more than enough features to satisfy most needs.



*Text Design* has been designed with simplicity and user friendliness first, but in many ways it feels more like a full editor than a word processor. It has a pleasing Breakdown 2.0 look, even has 1/20.0 resolutions, and is extremely easy to use. What its manual are on user facing with options. It has a console mode to it that makes it very appealing. Unfortunately, it doesn't seem to include any sort of undo, but it does include other word wrap and other features.

It also offers support for a huge variety of text styles and sizes, including rich and superior proportions, enlarged and Plus. Despite its simplicity, *Text Plus* is a little crippled by its lack of mouse controlled movement and editing functions. (Disk code: 0120 From: 17th Software)





**FastPlus** also simulates the DTP tools, in color, or at least, it also seems to contain all of the features that FastImage doesn't. It even supports multi-object editing. It includes Comprehensive mark marking and editing facilities, not to mention search and replace and even smart material access to DTP. Powercolor and the Master Blockout the program's author has also only not included in available graphics, contribution from pasts, the latest version of the program includes a very effective 'randomize' option, which means making changes. This randomize option allows the user to randomize the program's content. The user can also randomize the program's content. The user can also randomize the program's content. The user can also randomize the program's content. (Disk code 1700, Price: 17.00)



#### SPILL CHECKERS

**Off-Schedule** Since you have a spill checker, it's a good idea to make sure you don't make any changes to the program's content. The user can also randomize the program's content. The user can also randomize the program's content. The user can also randomize the program's content. (Disk code 1700, Price: 17.00)



#### PRINT PROGRAMS

Once you've managed your printing master piece, it's not much good unless you can print it out. Of course, multi-work processors include their own print routines, but for really precise control of your specific printer, there are a number of programs available. The most powerful of these is called Print Studio, and it can handle both text and graphics. As far as text printing goes, it gives facilities to print text in a variety of formats, letting you specify headlines, line and page numbering, etc. It also lets you decide whether or not you wish to print an entire document or just portions of it. As for graphics handling, again it offers you the options to print all or just part of a screen. If you just want a part, it will be enlarged to fit your paper. (Disk code 1800, Price: 18.00)

Along with the subject of printing, 17-bit's Print Disk contains a selection of small print utilities and printer drivers which between them can make life easier. For example, **Spooler** lets you create a buffer into which all printing is sent before it goes to the printer. This means that you can get on with using your computer again almost immediately whilst the printer gradually reads the contents of the buffer in its own time. (Disk code 1810, Price: 17.00, Software)













# PD ANIMATION

*Seven years ago it was the sight of a ray-traced juggler on the A1000 which helped bring attention to Commodore's new wonder machine. Amiga animation has come a long way since then. Here are some of the best, the people who produced them and how they were done.*



## LEADERS OF THE PACK

Very much the man of the moment is Eric Schwartz, an American college student whose work has gone down a storm in Europe. Apart from the quality of his animations, they feature strong characters and are well scripted, which sets them apart from many currently available animations. There is now a video review available from Philips which features a helpful overview.

Another star on the animation scene is Thomas Walker. Formerly based in Germany, he is now supplying a steady stream of ray-traced pictures to the PD experts for some pretty nice cash. Up to now he has also been responsible for creating some fascinating animation based around Star Trek.

Most gaining recognition is Jim Potemkin, whose work includes A Small Station At Night, a stunning animation which was recognised both early and recently. His work concentrates on 3D animation, which are made up from polygons, whereas the Amiga is its best.



## HOW IT'S DONE

Most Amiga animators use a variety of packages and techniques, but they all agree a powerful machine is needed. Eric Schwartz, for instance, produces his work on an A2000 with a hard drive and lots of memory. Even then he is restricted as most people don't have that kind of set up, so he has to make his movies down to earth with a minimum of mathematics. Despite the simplicity of his work, his work is superb. Describe the simplicity of his work. His work is superb. Describe the simplicity of his work. His work is superb. Describe the simplicity of his work. His work is superb.



## HILLBONDS - HELLRAISER 2

Quite simply Hellraiser's last bad guy. Formed, comes to your Amiga. It's a detailed, first sequence showing how he came to be the way he is. Look your glory up at the room when you play this one. (C) 1989. Disk code: 1044.

## MAXIMUM ON WHEELS

This is an example of Amiga video lighting. There are now several disks in this series, each containing original footage from the spectacular motor race crashes. (1989). Disk code: Mayhem.

## SHIPWORTH

Another top-class bit of Amiga animation. This time the two real boats in a fight are shown chasing a small boat across a desert. It culminates with the giant dragging the boat in as done their something into the ground. Not the best work but the still very good. (C) 1989. Disk code: 1048.







### CLASSY ANIMATIONS 1912

Steve Parker is a nice guy when putting the finishing touches to his big game, but it's his spare time he still finds time to complete the further adventures of Chuck, cartoon hero of the IPO world. This disc contains four Chuck games and two extras. In one Chuck takes time out from being his usual lovable self to terrify the local police on a motorcycle. In a strategy game of Akira, (MSX Disk code 14485)

### AEOLUS ANIMATION 33

Controlled by Tobias Richter, this is really an animation on the Amiga computer, showcasing the Italian. It's fast, smooth and one of the best-looking (MSX Disk code 14410)

### AMY VS THE WALKER

Remember the original Quack? This game of animation has an AT 4.7, designed from The Amiga Diskcode Book, showing duck and things and looking awfully good. This interpretation from Eric Schmidt, has the Walker moving in and at the hands of Amy the Quacker, via a study of Eric's dance (MSX Disk)

### ALIEN BREED

Team 17 commissioned Tobias Richter to produce an animation based on their Alien Breed game and the idea he used for starting to look at animation at least 1.5GBs worth (17 Disk)



### DISCANT THE DUNG BEETLE

This is a reason by Doug McMillan. It's very much in the style of Eric Schmidt's, although Eric has never employed a dung beetle as a star. Duncan is used doing what he does best, assessing a large lump of animal droppings. It's funny and rather disgusting, but a little rough in places. (Virus Files)

### MARK FLIGHT

This is another 3D animation showing a space craft coming in to land in a position Mark. The striking feature of few films is the detail kept up to objects such as the two things around the base. (MSX Disk)

### SWEET REFUGE

Does the deep sleep of the Pined Runner annoy you? It just doesn't seem right that little it. Cyprian should get the inside story—perhaps even on television out of the air at the time. What this game from Game Over changes all that. Not only is it perfectly in the current Times style, right down to view points and quality of animation it also has little it getting the bird. If you see where we mean. (MSX Disk)

### F IS

Another early Tobias Richter animation, this one though, is so close to South at the gate with an F. It's swooping in from the sky to land on a runway in the middle of nowhere. (MSX Disk)



### JUGGLER 2

Not content with releasing the classic trailer game, Eric Schmidt has also crafted the magnificent Amiga Juggler. His version features a tennis juggler along with his more original who takes up to five items and causes them to lose his concentration. (17 Disk)

### MUTTLEY AND THE BEANSTALK

Muttley has a 3D flying scene of music and cartoon references of the Beatles. You can enjoy a digital cartoon put together by Dave Heller. There is a good side and a bad side to this game. The quality of the big thing is excellent, but it requires 1MB to load and comes on three discs. If you have the hardware, and are a Muttley fan, this is a set of discs you must own. (17 Disk)

### MAGNETTE

If you have a little for something out of the ordinary, check this out. Magnetite if you don't know, is a surrealistic art, whose work usually involves devices made out of metal features and (lower) hand, over-sized businessmen placed in surreal situations. This disc takes some of his more notable work and animates them, which produces some interesting effects. (FD Disk)

### A SMALL STATION AT KERN

The original version of the Fortitude, Jim Robinson animation required 2MB to run. This version, as worked by Mark McMillan has had the visuals reduced to 256K, which means it will not run 1MB machines. Despite this, the result is still a stunning animation. (MSX Disk)

### ODYSSEY

Up it is the only one which can be applied to this game. Taking up five discs, Odyssey has turned several of Robert's tales of animation styles and music together to produce a series of stunning scenes on its 10MB discs. (MSX Disk)

### LEMMINGS REVENGE

And in the year we finished on Eric Schmidt, some discs had a rather aggressive all-fighter breeding program. Lemmings in a brilliant and so the Pyrexia player. Not to do out soon. Paddy McMillan has taken this one and further the Lemmings Revenge animation starts but exactly the same way as Paddy, although this time Lemmings to survive the carnage, gets into the rock up in a display who will be in a deal with the people. At good fun and very well as usual. It takes the film idea and you'll need almost two meg to run it. (Virus Files)













# WHERE TO BUY

Want to know where you can get hold of the disks you've been reading about? Here's a handy order form and a list of some of the many PD companies operating in and around the UK. After telephoning the company concerned to make sure of a disk's availability and price, just fill it in and send it off with a cheque or postal order.

While every attempt is made to ensure that the information we've printed in this guide is correct, obviously mistakes can creep in. Please bear this in mind when ordering. Also, we'd like to point out that CU Amiga and Amiga Guide can in no way be held responsible for the non-fulfilment of orders by the companies listed on this page. To the best of our knowledge, all are professional-grade businesses who will endeavour to fulfil orders as quickly as possible.

**PD COMPANIES** The following companies are well-established Britain's. Most of them stock a comprehensive range of disks and we've included their phone numbers so you can check the price of disks and Amiga compatibility before ordering.

**17 Bit Software**  
1st Floor  
28 London Street  
Bristol: W1 1 1DN  
(Tel: 0854 366666)

**16/32**  
32/16/32/64  
Seymour Road  
Maidenhead: SL6 2JH  
(Tel: 0628 717090)

**Alpha 3000 PD**  
114 Kings Cross Road  
London  
Newspaper  
(Tel: 0402 364626)

**Amiga**  
14 Windsor Road  
Warrington: W9 1 3QJ  
(Tel: 091 555 4557)

**Amiga 500's PD**  
Dunelm's Children's  
Weymouth, Dorset: DT9 3LJ  
(Tel: 0202 578728)

**Amigafile United**  
12 Windsor Road  
Thames  
Southampton  
(Tel: not available)

**Amiga PD**  
Amiga House  
115 Parkside Road  
Preston  
Lancs: PR1 1YH  
(Tel: 0524 247664)

**Berlin App PD**  
135 Kingshead  
Thames Marston  
Oxford: OX6 6 2R  
(Tel: 0823 207200)

**Bitterroot**  
Orchard House  
Purton Road  
Bath: BA2 1JH  
(Tel: 0225 474646)

**Cadman Computer**  
Barnard, 35 Cadman  
Avenue, Scarborough  
Cumbria: YO10 3LZ  
(Tel: 0447 811584)

**Crazy Joe's PD**  
145 Birmingham Road  
Rothamsted, Bucks  
High Wycombe: HP8 1L  
(Tel: 0295 333333)

**Dea PD**  
T. Hetherington  
Beach Hill, Wigton, Lancs  
Wigan: LB3  
(Tel: 0445 495291)

**Delectary**  
104 The Avenue  
Glastonbury, Somerset  
Bath: BA4 5EJ  
(Tel: 0234 480344)

**Five Star PD**  
48 Newnham  
Amington  
Warwick: CV7 9BL  
(Tel: 0527 66444)

**Fortis PD**  
PO Box 2  
Earl Street, Leicester  
LE1 5LA  
(Tel: 0455 850944)

**Gwynedd**  
4 Chandra Road  
Preston  
Lancs: PR6 8TE  
(0275 728716)

**Lead Capital PD**  
54 Cliffside Drive  
Bristol  
BS1 8LT  
(0274 22267)

**M2PD**  
4 Colchester Road  
Prosser, Southampton  
Tel: 0703 361641

**M8**  
1 Chair Lane  
Norton, Isle of Wight  
PO20 2QA  
(Tel: 0434 528584)

**Neon Software**  
104 Bonhill Road  
Maiden, Surrey  
GU8 3J7  
(Tel: 081 647775)

**Orion PD**  
14 Clifton Close  
Wardley, Cheshire  
Tyne and Wear  
NE15 6JZ  
(Tel: 091 428 8221)

**Pacific**  
12a Marsh Lane  
Tynemouth, Northumberland  
Bore: NE4 5PH  
(Tel: 0207 697441)

**PD Direct**  
84 George Street  
Leeds: LS1 3ET  
(Tel: 0113 716205)

**PD-Net**  
1 Bryant Avenue  
Southampton  
SO9 2ST  
(Tel: 0703 466300)

**PD Maps**  
135 Hazon Street  
Norwich: NR4 4JH  
(Tel: 0603 699606)

**PD-Net**  
11 Malpas Hall Road  
Kingston, Birmingham  
B20 1AD  
(Tel: 021 475 6007)

**South Unity PD**  
13 London Place  
Bournemouth  
BH1 2JZ  
(Tel: 0705 363476)

**Surreal Software**  
Bathampton  
Co. Dorset  
Blandford  
(Tel: 0125 89444501)

**Simply PD**  
11 Tice Place  
Barnes, W4, Herts  
Barnes: BN1 2UT  
(Tel: 0277 260683)

**System PD**  
2 Ridge Road  
Leckhampton, Northampton  
NN24 1PH  
(Tel: 0263 684372)

**Titanic PD**  
44 Peckham Road  
Canterbury, Kent  
CT4 2JH  
(Tel: 0222 617000)

**Valley PD**  
PO Box 18  
Rye, Co. Durham  
RD1 7P  
(Tel: 091 5671180)

**Virus Free PD**  
33 Mansfield Road  
Mansfield, Notts  
NG19 2LS  
(Tel: 0193 512227)

**Wash PD**  
48 Emerson Lane  
Widborough  
Cambridge: CB3 7JH  
(Tel: 0248 817107)

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